



Biopolymer-based material for optical phase conjugation

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Titre	Biopolymer-based material for optical phase conjugation
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Auteur	Mysliwiec, Jaroslaw [1], Miniewicz, Andrzej [2], Rau, Ileana [3], Krupka, Oksana [4], Sahraoui, Bouchta [5], Kajzar, François [6], Grote, James-G. [7]
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Résumé en anglais	<p>We present results of optical phase conjugation experiments in modified DNA (deoxyribonucleic acid) - dye system. The system consisted of a biopolymeric matrix made of DNA blended with cationic surfactant molecule cetyltrimethyl-ammonium chloride (CTMA) and doped with a photochromic dye Disperse Red 1. Results were obtained in a typical degenerate four wave mixing experiment. For sample excitation we used linearly polarized light at a wavelength 514.5 nm, delivered by an argon ion (Ar⁺) laser. The phase conjugated signal which emerged from the sample had rise and fall time constants of a few milliseconds with an excellent reversibility.</p>
URL de la notice	http://okina.univ-angers.fr/publications/ua2061 [8]

Liens

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